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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,039	10/27/2003	Shigeru Suzuki	FP03-105US	5741

1218 7590 09/09/2004

CASELLA & HESPOS
274 MADISON AVENUE
NEW YORK, NY 10016

EXAMINER

PEDDER, DENNIS H

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,039

Applicant(s)

SUZUKI ET AL.

Examiner

Dennis H. Pedder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/27/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-3, 5,6, 9, 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knettle et al. in view of Hu et al..

Knettle et al. have the substantially tubular links 46 pivotally connected for bending in a plane with a round bundle of cables 50, the cables stacked within the bundle to encompass the interior height of the link, but leaving empty space at either side of the bundle.

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Hu et al. teach that cables within a bendable sheath may be flexible flat cables 42 each with a plurality of conductors 40 and with the cables filling the space within the link. It would have been obvious to one of ordinary skill to provide in Knettle et al. flexible flat cables as taught by Hu et al. in order to maximize the space utilization within the link.

As to claim 2, the bending axis is normal to the upper surface of the flat cable.

As to claim 3, Knettle et al. stacks the cables vertically in a round bundle. Stacked flat cables are thus seen to be an obvious expedient, depending on thickness of such.

As to claim 6, see upper wall at numeral 54, figure 5 of Knettle et al. with a slit at either side of the numeral.

As to claim 9, the axes are parallel to the width of the flat cables.

As to claim 13, see upper sidewall of Knettle et al. at numeral 54 in figure 5 with a slit at either side of the numeral, the upper sidewall parallel to the axes. The width of the slit is extensive.

4. Claims 4, 7, 8, 10, 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knettle et al. in view of Hu et al. as applied to claims 3 and 9 above, and further in view of Kirtland.

No partition is seen in either reference above, but Kirtland discloses that a link may be partitioned at 10 to divide the link into two spaces, either space deemed usable for ordinary round cables or flat cables. Thus, It would have been obvious to one of ordinary skill to provide in the references above a partition within a link as taught by Kirtland in order to separate cables to prevent induction or abrasion therebetween.

As to claim 6, Kirtland has a slit 32.

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As to claim 7, the cable introducing portion between 28/28 is narrower than either cable shown and the cable holding portion is wider than either cable shown. Disposition of a similar sized flat cable is an obvious expedient to one of ordinary skill in the art.

As to claim 8, the cable introducing portion between 28/28 of Kirtland is between the slit and the cable holding portion.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4, 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "ordinary cables" is vague. Please define in a manner that would enable one to determine potential infringement.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Meier, Meier et al., Jensen, and Labonde et al. detail flat cable. Moritz shows a slit in an upper wall of a link cable guide and in US 4,769,985 shows chain guide for a box-type transmission line.

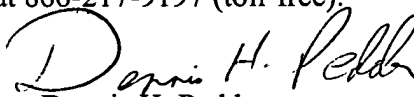
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis H. Pedder whose telephone number is (703) 308-2178.

The examiner can normally be reached on 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dennis H. Pedder
Primary Examiner
Art Unit 3612
9/3/04

DHP
9/3/2004